## I claim:

1. A method for transmitting data bits, the method which comprises:

allocating data bits to a plurality of channels;

providing a given time sequence in time-division multiplex frames for transmitting the data bits with a given data rate on a transmission path, the time-division multiplex frames each containing a plurality of multiplets such that for each of the channels a respective one of the multiplets includes a given number of the data bits; and

transmitting, in the time-division multiplex frames, in accordance with a given allocation of the channels to groups each including a subset of the channels, the multiplets of each of the groups in a time-interleaved manner such that between respective two of the data bits of one of the multiplets of a given one of the groups there is a respective one of the data bits of each remaining one of the multiplets of the given one of the groups and such that the groups are transmitted sequentially.

2. The method according to claim 1, which comprises:

providing a clock signal having a clock rate corresponding to the given data rate divided by a number of the channels allocated to the subset;

clocking a transmission of the data bits with the clock signal; and

triggering the clocking of the transmission of the data bits in each of the groups of successive ones of the multiplets with a mutual offset by one clock unit corresponding to the data rate.

3. The method according to claim 2, which comprises:

grouping the channels in pairs, each of the pairs including a first channel and a second channel;

clocking the data bits of the first channel in each of the groups with a first half of the clock unit; and

clocking the data bits of the second channel in each of the groups with a second half of the clock unit.

4. The method according to claim 2, which comprises:

grouping the channels in channel pairs, each of the cannel pairs including a first channel and a second channel; and

clocking the data bits of associated ones of the multiplets of the first channel in each of the groups with a first half of the clock unit; and

clocking the data bits of associated ones of the multiplets of the second channel in each of the groups with a second half of the clock unit.

- 5. The method according to claim 1, which comprises transmitting the data bits on a PCM bus in octets each including eight of the data bits.
- 6. The method according to claim 1, which comprises:

transmitting the data bits on a collision bus; and

additionally clocking, with a central component, a signal of the collision bus with a bus clock corresponding to the given data rate.

7. A device for generating time-division multiplex signals, comprising:

a plurality of latches, said latches receiving burst signals, the burst signals being allocated to groups each including a respective number of the burst signals, the burst signals containing respective data bit multiplets within a period of time-division multiplex frames with a given data rate, each of the data bit multiplets including a given number of data bits;

said latches being configured such that given ones of said latches allocated to one of the groups are driven in a time-shifted manner with a relative time offset with respect to one another for a time-interleaved transmission of the data bit multiplets of the burst signals, the relative time offset of said given ones of said latches within the one of the groups being smaller than a time interval between two of the data bits of one of the multiplets;

a common multiplexer; and

said latches having outputs connected to said common multiplexer.

8. The device according to claim 7, wherein:

said latches, within a given one of the groups, are clocked by a common clock signal with a clock rate corresponding to the



given data rate divided by a number of the burst signals of the given one of the groups; and

said latches allocated to successive ones of the burst signals in the given one of the groups are triggered with a mutual offset by a clock period corresponding to the given data rate.

9. The device according to claim 8, wherein:

said latches are configured for processing respective two of the burst signals in each of the groups; and

a first one of said latches in each of the groups is clocked by a first half of the clock period and another one of said latches is clocked by a second half of the clock period.

10. The device according to claim 7, wherein:

said common multiplexer includes a plurality of common group multiplexers having group multiplexer outputs;

a multiplexing device connected to said common group multiplexers;



said outputs of said latches of each one of the groups are connected to a respective one of said common group multiplexers; and

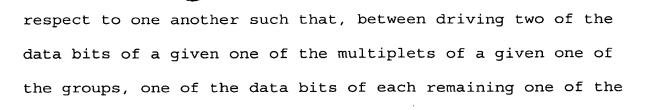
said latches are clocked by a clock signal and are configured such that signals at said outputs of said latches are released by the clock signal.

11. A device for obtaining burst signals from a time-division multiplex signal, comprising:

a plurality of latches, said latches receiving a time-division multiplex signal including, within time-division multiplex frames, data bits with a given data rate, the time-division multiplex frames containing a plurality of multiplets such that the multiplets are provided for respective ones of a plurality of burst signals, the burst signals being allocated to groups each including a number of the burst signals, and each of the multiplets including a given number of the data bits;

a respective one of said latches being allocated to a respective one of the burst signals; and

respective ones of said latches allocated to in each case one of the groups being driven with a mutual time offset with



12. The device according to claim 11, wherein:

multiplets of the given one of the groups is driven.

said latches, within a given one of the groups, are clocked by a common clock signal with a clock rate corresponding to the given data rate divided by a number of the burst signals of the given one of the groups; and

said latches allocated to successive ones of the burst signals in the given one of the groups are triggered offset with respect to one another by a clock period corresponding to the given data rate.

13. The device according to claim 12, wherein:

said latches are configured for processing respective two of the burst signals in each of the groups; and

a first one of said latches in each of the groups is clocked by a first half of the clock period and a second one of said latches is clocked by a second half of the clock period.